

Leaving Spaceship Europe: British space policy after Brexit



After years of building spacepower for Brussels, London seems set to jettison from it and enter the unknown of commercial life in space outside the single market and customs union. [Bleddyn Bowen](#) considers the costs of Britain leaving the EU while the latter is asserting itself as an independent and concrete spacepower.

The history of British involvement in the development and exploitation of outer space for military, economic, political, and scientific purposes – or spacepower – is largely a history of integration and alliance. On the one hand, Britain has integrated with the American military and intelligence space networks under the 5 Eyes agreement and the ‘special relationship’. On the other, the British scientific and commercial space sectors have integrated with the European Space Agency and the EU’s space policies.

Space is a strategic environment that provides military advantages, enables economic exploitation, and advances technology and scientific knowledge which benefits life on Earth. It is not for nothing that 1,700 active satellites now orbit Earth. In the so-called [Second Space Age](#), outer space is becoming more accessible to smaller countries due to the decreasing costs of rockets and satellite manufacturing, and is increasingly commercial in its character rather than solely funded by public money.

Britain is well-placed to thrive in the Second Space Age. Lower access costs to space through new commercial launch providers, as well as innovations in small satellites are transforming what smaller countries can do in space. Britain’s space industry is a leader in small satellite technologies. New innovations in surveillance or Earth observation small satellites, as well as high-resolution live video of Earth’s surface from space show that Britain can deploy affordable and cutting-edge capabilities that may be of interest to the British government. British investors [ranked first](#) in global investment in the space economy outside the United States.

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However, Britain’s commercial, industrial, and scientific success is threatened by Brexit: 50% of satellite exports go into the single market, and construction costs are kept low because of the tariff-free trade to import and export components among the EU’s space industry which is dotted across the continent. The EU’s member states are also primed to benefit from the Second Space Age – and will continue to receive direct EU support to thrive. Like the UK, other European countries are developing spaceports and small satellite launchers but will remain more competitive for the EU’s satellite manufacturers within the customs union and single market.

On a more political note, Britain risks losing its voice in shaping the strategic direction of the EU as a space power. The European Space Agency (ESA) is increasingly an implementing agency of EU space policy. Though the European Space Agency contains members outside the EU and is nominally outside of the EU’s governing structures, the EU is ESA’s single-largest source of funding. Outside the EU, Britain loses influence in where the big pots of money within ESA are going to be apportioned.

British spacepower will actually be threatened by the EU’s space industrial policy, rather than supported by it as in the present. [The policy](#) dictates that EU-funded ESA projects must be contracted to EU member states within ESA, and requires secure and privileged access to their data and services.

Brexit takes British space commerce into unknown territory due to the fact that one the EU’s flagship space projects is being constructed in Britain: the *Galileo* navigation system. Those satellites have been constructed in the UK, [but Brexit has already cast doubt on any future contracts to British-based companies and factories](#), and *Galileo* ground stations planned for Britain have already been moved to elsewhere in the EU. Furthermore, there is the possibility that the Public Regulated Service – secure military-grade signals from *Galileo* – may be unavailable to Britain once it leaves the EU.

Whilst members of ESA that are within the customs union and single market may still have some access to funds and services, like Norway and Switzerland, the government's signalling still suggests Britain does not seek to keep this level of access to the single market and customs union. This means Britain may have to go it alone in its industrial and commercial ventures in space, as well as relying almost entirely on American or bilateral European space cooperation on the military side of space capabilities. Being beholden to only one giant of space power reduces British military, economic, diplomatic, and political flexibility in future.

Despite the special relationship, there is no guarantee that America will provide everything Britain requires in space. Like many other aspects of British transatlantic diplomacy, the British voice inside the EU was of great value to America – and space is no exception.

In space, no-one can hear you Brexit

Whilst there are opportunities for Britain to develop specific capabilities in space that champions its own successful and innovative industry – such as Earth observation/spy satellites, navigation, and space tracking – this will cost money and demand public investment. Of these, Earth observation and space tracking are realistic opportunities. However, the UK Space Agency is currently investigating the option of [building a rival system to Galileo](#).

Yet price tag [of €10bn for Galileo](#) should warrant some caution on whether Britain should spend so much to duplicate a massive space infrastructure that will compete with American and European systems, each with their own continent-wide applications markets to support them, such as mobile apps, precision agriculture, infrastructure construction and monitoring, autonomous vehicles.

In addition to this, the EU and America came to blows in 2003 over the risks *Galileo* signals posed for GPS signals and whether they could co-exist. The EU managed to gain a long-term concession from the United States once it gained the support of China. Should Britain develop its own global navigation system, what restrictions would the EU and America wish to impose on British navigation signals, as America wished to do with the EU's 15 years ago?

Whatever Brexit means in space, the well-endowed British space economy will have to work much harder and smarter to maintain its competitive edge whilst the US and EU – with their own large, integrated single markets – aim to take full advantage of the Second Space Age for themselves at the expense of smaller, newly-isolated competitors like Britain, which will lose its voice in the direct governance and development of some of the most high-quality and comprehensive satellite infrastructures in the world.

If Britain is to bargain for exemptions from Brexit in its space sector (to cherry-pick), such as continuing its involvement in the security aspects of Galileo and producing government communications satellites with the European Defence Agency, it raises difficult questions for the May government on why Britain is still contributing to EU-controlled space budgets whilst the country voted to leave the European Union, and whether leaving really means leaving.

Britain is walking away from one of the biggest platforms for being heard in the vacuum of space – and this should not be ignored because [transatlantic space cooperation is never assured](#). Whilst Britain increases its military and intelligence dependency on the United States by leaving the EU, and its access to the EU's space security data and services, it will have to forge its own path to navigate the commercial opportunities and threats in the Second Space Age.

Note: the above draws on the author's [published work](#) in the *British Journal of Politics and International Relations*.

About the Author



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